IN THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended): A radio channel setting control method of controlling a radio channel used for communications between a base-station apparatus and a mobile-station apparatus in a mobile communications system employing a CDMA scheme including the base-station apparatus, mobile-station apparatus, and a radio network control apparatus controlling the base-station apparatus, comprising the steps of:
- a) determining whether or not a spread code used for the communications can be allocated;
 - b) determining whether or not a predetermined hardware device can be allocated;
 - c) determining whether or not a radio resource can be allocated; and
- d) setting the radio channel between the base-station apparatus and mobile-station apparatus when it is determined that the spread code, predetermined hardware device and radio resource can be allocated,

wherein said determining whether or not a spread code used for the communications can be allocated step includes accessing a spread code management table and determining that the spread code can be allocated when there is an unused channelization code.

2. (Currently Amended): The method as claimed 1, wherein: further comprising: measuring a first uplink interference, electric power which is the a total of interference electric power directed to the base-station apparatus from the mobile-station apparatus; is measured, and

determining that the radio resource can be allocated when if the thus-obtained measured first uplink interference electric power is equal to or smaller than a first threshold, it is determined that the radio resource can be allocated.

Application No. 10/072,993
Reply to Office Action of April 4, 2006

3. (Currently Amended): The method as claimed in claim 2, wherein: further comprising:

it is determined determining to allow allocation of a radio resource for an uplink circuit directed to the base-station apparatus from the mobile-station apparatus when the first uplink interference electric power is equal to or smaller than the first threshold.

4. (Currently Amended): The method as claimed in claim 1, wherein: further comprising:

measuring a first downlink transmission power, which is the total of transmission electric power directed to the mobile-station apparatus from the base-station apparatus; is measured, and

determining to allow allocation of the radio resource if when the thus-obtained first downlink transmission electric power is equal to or smaller than a second threshold, it is determined to allow allocation of the radio resource.

5. (Currently Amended): The method as claimed in claim 4, wherein: further comprising:

determining that a radio resource for a downlink circuit directed to the mobile station apparatus from the base-station can be allocated if when the first downlink transmission electric power is equal to or smaller than the second threshold, it is determined that a radio resource for a downlink circuit directed to the mobile station apparatus from the base station apparatus can be allocated.

4

6. (Currently Amended): The method as claimed in claim 4, wherein: further comprising:

<u>determining</u> allocation allowableness/disallowableness of the spread code used for the communications is determined by the radio network control apparatus;

measuring the first uplink interference electric power and the first down-link transmission electric power are measured by the base-station apparatus;

determining, based on the thus-obtained measured first uplink interference electric power and the first down-link transmission electric power, the allocation allowableness/disallowableness of the radio resource used for the communication; is determined, and

determining the allocation allowableness/disallowableness of the predetermined hardware device in the base-station apparatus used for the communications is determined, by the base-station apparatus;

informing the radio network control apparatus of the determination results on the allocation allowableness/disallowableness of the radio resource and predetermined hardware device are informed of to the radio network control apparatus; and

the radio network control apparatus sets setting the radio channel when each of all the determination results on the allocation allowableness/disallowableness for the abovementioned spread code, predetermined hardware device, and radio resource is affirmative by the radio network control apparatus.

7. (Currently Amended): The method as claimed in claim 4, wherein: further comprising:

<u>determining</u> the allocation allowableness/disallowableness of the spread code used for the communications is <u>determined</u> by the radio network control apparatus; determining the allocation allowableness/disallowableness of the predetermined hardware device in the base-station apparatus used for the communications is determined by the same radio network control apparatus;

the base-station apparatus measures measuring the first uplink interference electric power and the first downlink transmission electric power by the base station apparatus;

determining, based on the thus-obtained first uplink interference electric power and first downlink transmission electric power, the allocation allowableness/disallowableness of the radio resource used for the communications-is determined by the base-station apparatus;

<u>informing</u> the determination result of the allocation allowableness/disallowableness of the radio resource is informed to the radio network control apparatus; and

apparatus if when each of all the determination results on the allocation allowableness/disallowableness of the spread code, predetermined hardware device, and the radio resource is affirmative, the radio channel between the base station apparatus and mobile-station apparatus is set by the radio network control apparatus.

8. (Currently Amended): The method as claimed in claim 4, wherein; further comprising:

determining the allocation allowableness/disallowableness of the predetermined hardware device in the base-station apparatus used for the communications is determined by the base-station apparatus;

measuring the first uplink interference electric power and first downlink transmission electric power are measured by the same by the base-station apparatus;

informing the determination result of the allocation allowableness/disallowableness of the predetermined hardware device, and the first uplink interference electric power and first

downlink which transmission electric power measured are informed of to the radio network control apparatus;

determining the radio network control apparatus determines allocation allowableness/disallowableness of the spread code used for the communications by the radio network control apparatus;

determining, based on the first uplink interference electric power and the first downlink transmission electric power informed of by the base-station apparatus, the radio network control apparatus determines allocation allowableness/disallowableness of the radio resource used for the communications by the radio network control apparatus; and

setting the radio channel is set between the base-station apparatus and mobile-station apparatus by the radio network control apparatus, when if each of all the determination results on the allocation allowableness/disallowableness for the spread code, predetermined hardware device, and the radio resource is affirmative.

9. (Currently Amended): The method as claimed in claim 4, wherein; further comprising:

<u>determining</u> allocation allowableness/disallowableness of the spread code used for the communications by the radio network control apparatus; is determined, and

determining allocation allowableness/disallowableness of the predetermined hardware device in the base-station apparatus used for the communications is determined, by the radio network control apparatus;

measuring the first uplink interference electric power and first downlink transmission electric power are measured by the base-station apparatus;

informing the radio network control apparatus of the thus-obtained first uplink interference electric power and first downlink which transmission electric power-are informed of to radio network control apparatus;

deterring, based on the thus-obtained first uplink interference electric power and first downlink transmission electric power-informed of by the base-station apparatus, the radio network control apparatus determines-allocation allowableness/disallowableness of the radio resource used for the communications by the network control apparatus; and

setting the radio channel between the base station apparatus and the mobile-station apparatus by the network control apparatus if when each of all of the determination results on the allocation allowableness/disallowableness of the spread code, predetermined hardware device, and radio resource is affirmative, the radio network control apparatus sets the radio channel between the base-station apparatus and the mobile station apparatus.

10. (Currently Amended): The method as claimed in claim 1, wherein; further comprising:

<u>deriving</u> a second uplink interference electric power directed to the base-station apparatus from the mobile-station apparatus newly occurring by the communications is derived;

measuring the first uplink interference, electric power which is the total of interference electric power directed to the base-station apparatus from the mobile-station apparatus-is measured;

calculating a the sum of the thus-obtained second uplink interference electric power and first uplink interference electric power is calculated; and

determining that allocation of the radio resource used for the communications is
allowable if when the sum of the first uplink interference electric power and second uplink

interference electric power is equal to or smaller than a third threshold, it is determined that allocation of the radio resource used for the communications is allowable.

11. (Currently Amended): The method as claimed in claim 10, wherein; further comprising:

determining to allow allocation of a radio resource for an uplink circuit directed to the base station apparatus from the mobile-station apparatus if when the sum of the first uplink interference electric power and the second uplink interference electric power is equal to or smaller than the third threshold, it is determined to allow allocation of a radio resource for an uplink circuit directed to the base station apparatus from the mobile station apparatus.

12 (Canceled).

13. (Currently Amended): The method as claimed in claim 10, wherein further comprising:

<u>deriving</u> the second uplink interference <u>electric power is derived at least</u> based on <u>at least one of the a chip rate, or the an information transmission rate of the communications, the <u>a signal</u> to noise <u>electric power</u> ratio corresponding to the chip rate or the information transmission rate of the communications, and the uplink interference <u>electric power</u>.</u>

14. (Currently Amended): The method as claimed in claim 1, wherein; further comprising:

measuring a first downlink transmission electric power directed to the mobile-station apparatus from the base-station apparatus-is measured;

deriving a second downlink transmission electric power directed to the mobile-station apparatus from the base-station apparatus-required for the communications is derived; and it is determined determining to allow allocation of the radio resource used for the communications, when if the sum of the first down-link transmission electric power and

second down-link transmission electric power is equal to or smaller than a fourth threshold.

15. (Currently Amended): The method as claimed in claim 14, wherein; further comprising:

allowing allocation of a radio resource for a down-link circuit directed to the mobile-station apparatus from the base station apparatus if when the calculated sum of the second down-link transmission electric power and first downlink transmission power is equal to or smaller than the fourth threshold, allocation of a radio resource for a down-link circuit directed to the mobile station apparatus from the base station apparatus is allowed.

16. (Canceled)

17. (Currently Amended): The method as claimed in claim 14, wherein: further comprising:

deriving the second downlink transmission electric power is derived based on at least one of a quality on a pilot channel and reception electric power in the mobile-station apparatus.

18. (Currently Amended): The method as claimed 14, wherein; comprising:

deriving the second downlink transmission electric power is derived at least based on at least a ratio of a receiving energy per one chip on a pilot channel to an interference electric

power in the mobile-station apparatus, a spreading factor of a physical channel used for the communications, a signal to noise electric power ratio that the communications requires, and a transmission electric power on the pilot channel in the base-station apparatus.

19. (Currently Amended): The method as claimed in claim 14, wherein: further comprising:

the radio network control apparatus determines determining allocation allowableness/disallowableness of the spread code used for the communications by the radio network control apparatus;[[,]]

derives <u>deriving</u> at least one of the second uplink interference <u>electric</u> power and second downlink transmission <u>electric</u> power <u>by the radio network control apparatus;</u>

informing the base-station apparatus, in case the second uplink interference electric power is derived, of the derived the second uplink interference electric power is informed of to the base station apparatus, and, when the second downlink transmission electric power is derived, of the second downlink transmission electric power is informed of to the base station apparatus;

the base-station apparatus measures measuring the first uplink interference electric power and first downlink transmission power by the base-station apparatus;

in case if the derived the second uplink interference electric power is transmitted by the radio network control apparatus, the base station apparatus calculates calculating a sum of the first uplink interference electric power and the second uplink interference electric power by the base station,

while, in case <u>if</u> the <u>derived</u> second downlink transmission power was <u>is</u> transmitted by the radio network control apparatus, the base-station apparatus calculates <u>calculating</u> a

sum of the first downlink transmission power and the second downlink transmission power by the base station apparatus;

in case-if both the sum of the first uplink interference electric power and second uplink interference electric power and the sum of the first downlink transmission power and second downlink transmission power are thus calculated, based on these sums, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first uplink interference and second uplink interference and the sum of the first downlink transmission power and the second downlink transmission power;

in case if only the sum of the first uplink interference electric power and second uplink interference electric power is thus calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined is based on the sub of the first uplink interference and second uplink interference;

in case if only the sum of the first downlink transmission power and second downlink transmission power is thus calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined is based on the sum of the first downlink transmission power and second downlink transmission power;

determining allocation allowableness/disallowableness for the predetermined hardware device in the base-station apparatus used for the communications-is-determined;

informing the radio network control apparatus of the thus-obtained determination results on the allocation allowableness/disallowableness for the radio resource and hardware device-are informed of to the radio network control apparatus; and

the radio network control apparatus sets setting the radio channel between the basestation apparatus and mobile-station apparatus by the radio network control apparatus when Reply to Office Action of April 4, 2006

each of all of the determination results on the allocation allowableness/disallowableness for the spread code, predetermined hardware device and radio resource is affirmative.

20. (Currently Amended): The method as claimed in claim 14, wherein: further comprising:

the radio network control apparatus determines determining allocation allowableness/disallowableness for the spread code used for the communications by the radio network control apparatus;[[,]]

determines determining allocation allowableness/disallowableness for the predetermined hardware device in the base-station apparatus used for the communications by the radio network control apparatus;, and derives

<u>deriving</u> at least one of the second uplink interference <u>electric power</u> and second downlink transmission <u>electric</u> power <u>by the radio network control apparatus;</u>

in case if the second uplink interference electric power is derived, informing the base station apparatus of the second uplink interference; electric power is informed of the base station apparatus, and,

<u>in case if</u> the second downlink transmission electric power is derived, <u>informing the</u>

<u>base-station apparatus of</u> the second downlink transmission electric power is informed of to

the base station apparatus;

the base station apparatus measures measuring the first uplink interference electric power and first downlink transmission power by the base-station apparatus;

in case if the second uplink interference electric power is transmitted by the radio network control apparatus, the base station apparatus calculates calculating a sum of the first uplink interference electric power and the second uplink interference electric power by the base-station apparatus, and, in case

if the second downlink transmission power is transmitted by the radio network control apparatus, the base-station apparatus calculates calculating a sum of the first downlink transmission power and the second downlink transmission power by the base-station apparatus;

in case if both the sum of the first uplink interference electric power and second uplink interference electric power and the sum of the first downlink transmission power and second downlink transmission power are calculated, based on these sums, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first uplink interference and second uplink interference and the sum of the first downlink transmission power and second downlink transmission power;

in case if only the sum of the first uplink interference electric power and second uplink interference electric power is calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications-is determined based on the sum of the first uplink interference and second uplink interference;

in case if only the sum of the first downlink transmission power and second downlink transmission power is calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications-is determined based on the sum of the first downlink transmission power and second downlink transmission power;

the thus obtained determination result is informed of to informing the radio network control apparatus of the obtained determination result for the spread code and hardware resource; and

the radio network control apparatus sets setting the radio channel between the basestation apparatus and mobile-station apparatus by the network control apparatus when each of all of the determination results on the allocation allowableness/disallowableness for the spread code, predetermined hardware device and radio resource is affirmative.

21. (Currently Amended): The method as claimed in claim 14, wherein; further comprising:

the base-station apparatus determines determining allocation allowableness/disallowableness for the predetermined hardware device in the base-station apparatus used for the communications by the base-station apparatus;, and measures

measuring the first uplink interference electric power and first downlink transmission power by the base-station apparatus;

informing the radio network control apparatus of the determination result on the allocation allowableness/disallowableness for the predetermined hardware device, and the measured first uplink interference electric power and first downlink transmission power are informed of to the radio network control apparatus;

the radio network control apparatus determines determining allocation allowableness/disallowableness for the spread code used for the communications by the network control apparatus;, and derives

<u>deriving</u> at least one of the second uplink interference electric power and second downlink transmission electric power by the network control apparatus;

in case if the second uplink interference electric power is derived, <u>calculating</u> a sum of the first uplink interference electric power and the second uplink interference; electric power is calculated, and,

in case if the second downlink transmission electric power is derived, calculating a sum of the first downlink transmission power and the second downlink transmission electric power-is calculated;

in ease if both the sum of the first uplink interference electric power and second uplink interference electric power and the sum of the first downlink transmission power and second downlink transmission power are calculated, based on these sums, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first uplink interference and second uplink interference and the sum of the first downlink transmission power and second downlink transmission power;

in case <u>if</u> only the sum of the first uplink interference electric power and second uplink interference electric power is calculated, based thereon, <u>determining</u> allocation allowableness/disallowableness for the radio resource used for the communications <u>based on</u> the sum of the first uplink interference and second uplink interference is determined;

in case if only the sum of the first downlink transmission power and second downlink transmission power is calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications—is determined based on the sum of the first downlink transmission power and second downlink transmission power;

the radio network control apparatus sets setting the radio channel between the base-station apparatus and mobile-station apparatus by the network control apparatus when each of all of the determination results on the allocation allowableness/disallowableness for the spread code, predetermined hardware device and radio resource is affirmative.

22. (Currently Amended): The method as claimed in claim 14, wherein: further comprising:

the radio network control apparatus determines determining allocation allowableness/disallowableness for the spread code used for the communications by the radio network control apparatus; determines

determining allocation allowableness/disallowableness for the predetermined hardware device in the base-station apparatus used for the communications by the radio network control apparatus; and derives deriving at least one of the second uplink interference electric power and second downlink transmission electric power by the radio network control apparatus;

the base station apparatus measures measuring the first uplink interference electric power and first downlink transmission power by the base station; which are then informed of to

<u>informing</u> the radio network control apparatus <u>of the measure first uplink interference</u> and first downlink transmission power;

in case if the second uplink interference electric power is derived, calculating a sum of the first uplink interference electric power and the second uplink interference; electric power is calculated, and

in case if the second downlink transmission electric power is derived, calculating a sum of the first downlink transmission power and the second downlink transmission electric power is calculated;

in case if both the sum of the first uplink interference electric power and second uplink interference electric power and the sum of the first downlink transmission power and second downlink transmission power are calculated, based on these sums, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first uplink interference and second uplink interference

and the sum of the first downlink transmission power and the second downlink transmission power;

in case if only the sum of the first uplink interference electric power and second uplink interference electric power is calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first uplink interference and second uplink interference;

in case if only the sum of the first downlink transmission power and second downlink transmission power is calculated, based thereon, determining allocation allowableness/disallowableness for the radio resource used for the communications is determined based on the sum of the first downlink transmission power and second downlink transmission power; and

the radio network control apparatus sets setting the radio channel between the base-station apparatus and mobile-station apparatus by the radio network control apparatus when each of all of the determination results on the allocation allowableness/disallowableness for the spread code, predetermined hardware device and radio resource is affirmative.

23. (Currently Amended): A radio network control apparatus controlling communications between a subordinate base-station apparatus and a mobile-station apparatus in a mobile communications system employing a CDMA scheme, comprising:

a determination obtaining part obtaining configured to obtain a determination result as to whether or not a spread code used for the communications, a predetermined hardware device in the base-station apparatus and a radio resource can be allocated; and

a radio channel setting part setting-up configured to setup a radio channel between the base-station apparatus and the mobile-station apparatus when the spread code, predetermined hardware device and radio resource can be allocated,

wherein the determination obtaining part is configured to determine whether or not the spread code used for the communications can be allocated by accessing a spread code management table and determining that the spread code can be allocated when there is an unused channelization code.

24. (Currently Amended): The radio network control apparatus as claimed in claim 23, further comprising:

a spread code allocation allowableness/disallowableness determining part determining configured to determine allocation allowableness/disallowableness for the spread code.

25. (Currently Amended): The radio network control apparatus as claimed in claim 23, further comprising;[[;]]

a spread code allocation allowableness/disallowableness determining result receiving part receiving configured to receive a determination result on allocation allowableness/disallowableness for the spread code from the base-station apparatus.

26. (Currently Amended): The radio network control apparatus as claimed in claim 23, further comprising:

a hardware device allocation allowableness/disallowableness determining part determining configured to determine allocation allowableness/disallowableness for the predetermined hardware device.

27. (Currently Amended): The radio network control apparatus as claimed in claim 23, further comprising:

a hardware device allocation allowableness/disallowableness determining result receiving part receiving configured to receive a determination result on allocation .

allowableness/disallowableness for the predetermined hardware device from the base-station apparatus.

28. (Currently Amended): The radio network control apparatus as claimed in claim 23, further comprising:

a radio resource allocation allowableness/disallowableness determining part determining configured to determine allocation allowableness/disallowableness for the radio resource.

29. (Currently Amended): The radio network control apparatus as claimed in claim23, further comprising:

a radio resource allocation allowableness/disallowableness determining result receiving part receiving configured to receive a determination result on allocation allowableness/disallowableness for the radio resource from the base-station apparatus.

30. (Currently Amended): The radio network control apparatus as claimed in claim 28, wherein:

the radio resource allocation allowableness/disallowableness determining part determines is configured to determine that allocation of the radio resource is possible when a first uplink interference electric power which is the total of interference electric power directed to the base-station apparatus from the mobile-station apparatus is equal to or smaller than a first threshold.

Application No. 10/072,993 Reply to Office Action of April 4, 2006

31. (Currently Amended): The radio network control apparatus as claimed in claim 30, wherein:

the radio resource allocation allowableness/disallowableness determining part determining is configured to determine that allocation of a radio resource for an uplink circuit directed to the base-station apparatus from the mobile-station apparatus is possible when the first uplink interference electric power is equal to or smaller than of the first threshold.

32. (Currently Amended): The radio network control apparatus as claimed in claim 28, wherein:

the radio resource allocation allowableness/disallowableness determining part determines is configured to determine that the radio resource can be allocated when a first downlink transmission electric power, which is the total of transmission electric power directed to the mobile-station apparatus from the base-station apparatus, is equal to or smaller than a second threshold.

- 33. (Currently Amended): The radio network control apparatus as claimed in claim 32, wherein: the radio resource allocation allowableness/disallowableness determining part determines is configured to determine that a radio resource for a downlink circuit directed to the mobile-station apparatus from base-station apparatus when the first downlink transmission electric power is equal to or smaller than the second threshold.
- 34. (Currently Amended): The radio network control apparatus as claimed in claim 28, wherein:

the radio resource allocation allowableness/disallowableness determining part

determines is configured to determine that the radio resource can be allocated when a sum of

a first uplink interference, electric power which is a total of interference electric power directed to the base-station apparatus from the mobile-station apparatus, and a second uplink interference electric power directed to the base-station apparatus from the mobile-station apparatus newly occurring by the communications is equal to or smaller than a third threshold.

35. (Currently Amended): The radio network control apparatus as claimed in claim 34, wherein:

the radio resource allocation allowableness/disallowableness determining part

determines is configured to determine that allocation of a radio resource for a uplink circuit

directed to the base-station apparatus from the mobile-station apparatus is possible when the

sum of the uplink interference electric power and the second uplink interference electric

power is equal to or smaller than the third threshold.

36. (Currently Amended): The radio network control apparatus as claimed in claim 28, wherein:

the radio resource allocation allowableness/disallowableness determining part determines determining that allocation of the radio resource used for the communications is possible when a sum of a first downlink transmission electric-power, which is a total of transmission electric power directed to the mobile-station apparatus from the base-station apparatus, and a second downlink transmission electric power directed to the mobile-station apparatus from the transmission electric power required for the communications is equal to or smaller than a fourth threshold.

Application No. 10/072,993
Reply to Office Action of April 4, 2006

37. (Currently Amended): The radio network control apparatus as claimed in claim 36, wherein:

the radio resource allocation allowableness/disallowableness determining part

determines is configured to determine that allocation of a radio resource for a downlink

circuit directed to the mobile-station apparatus from the base-station apparatus when the sum

of the first downlink transmission electric power and second downlink electric transmission

power is equal to or smaller than the fourth threshold.

38. (Currently Amended): A base-station apparatus performing communications with a mobile-station apparatus under control of a mobile network control apparatus in a mobile communications system employing a CDMA scheme, comprising:

an allocation allowableness/disallowableness determining part determining configured to determine whether allocation of at least any one a spread code used for the communications, a predetermined hardware device in the base-station apparatus and a radio resource is possible; and

a determination result transmitting part transmitting configured to transmit a determination result of the allocation allowableness/disallowableness determining part,

wherein allocation of a radio channel between the base-station apparatus and mobilestation apparatus is allowed when the spread code, predetermined hardware device and radio resource can be allocated, and

the allocation allowableness/disallowableness determining part is configured to determine whether or not the spread code used for the communications can be allocated by accessing a spread code management table and determining that the spread code can be allocated when there is an unused channelization code.

Application No. 10/072,993 Reply to Office Action of April 4, 2006

39. (Currently Amended): A mobile communications system comprising a base-station apparatus, a mobile-station apparatus and a radio network control apparatus controlling the base-station apparatus, employing a CDMA scheme, wherein[[:]] at least any of the base-station apparatus and radio network control apparatus comprises:

a spread code allocation allowableness/disallowableness determining part determination whether or not a spread code used for the communications between the base-station apparatus and mobile-station apparatus can be allocated; a hardware device allocation allowableness/disallowableness determining part determination whether or not a predetermined hardware device in the base-station apparatus used for the communications can be allocated; a radio resource allocation allowableness/disallowableness determining part determination whether or not a radio resource used for the communications can be allocated; and a radio channel setting part setting a radio channel between the base-station apparatus and mobile-station apparatus when the spread code, predetermined hardware device and radio resource can be allocated,

the spread code allocation allowableness/disallowableness determining part is configured to determine whether or not the spread code used for the communications can be allocated by accessing a spread code management table and determining that the spread code can be allocated when there is an unused channelization code.